

CITY OF WAUKESHA

Standard Construction Specifications

Revisions: March, 1989

PART 1
INSTRUCTION TO BIDDERS

Each bidder must state in his proposal his full name and business address. If an incorporated company, the State under the laws of which the company was incorporated must be stated. Such company must be licensed to do business in the State of Wisconsin before a contract can be awarded to it to do the work embraced in the proposal. Each proposal must be signed by the party properly authorized to submit it.

Each bidder must seal his proposal in an envelope upon which shall be plainly stated the title of the work for which the proposal is intended to be made, and deliver it to the Board of Public Works at its office not later than the time specified in the Official Notice to Contractors. The proposal shall be accompanied with a bid bond or, in lieu thereof, a certified check in the amount of not less than 5% of the base bid.

No proposal will be considered which is not made out on the regular form furnished by the Engineer and the bidder shall make no changes or additions thereto.

Each bidder shall make his own estimate of the quantities and calculate his prices accordingly.

Bidders must satisfy themselves by personal examination of the location of the proposed work, and by such other means as they prefer as to the character of the work to be done and the intent of the specifications. After the submission of the proposal, no complaint or claim that there was any misunderstanding in regard to the estimate of the Engineer, or the nature or quantity of work to be done, will be entertained.

A proposal will be disregarded unless the bidders show satisfactory evidence that they have been regularly engaged in the business of constructing work as herein described.

The contract shall be deemed as having been awarded upon approval by the Common Council and when formal notice of the award shall have been duly served upon the intended awardee (i. e., the bidder to whom the Owner contemplated awarding the contract) by the Board of Public Works.

The bidder to whom the contract has been awarded will be required to execute and deliver three (3) copies of the contract and performance bond, said contract to be in the form approved by the Board of Public Works and delivered to the Director of Public Works at the office of the Director of Public Works in the City Hall within ten (10) days from the date of a notice from said Director of Public Works that the contract has been so awarded. In case of failure to do so, said bidder shall be considered as having abandoned his proposal and is in default to the City of Waukesha to the full amount of the deposit accompanying his proposal, it being distinctly understood and agreed by the party tendering the proposal that the City of Waukesha will suffer by reason of the Bidder's default in properly executing the contract and furnishing sureties after the contract has been awarded to him.

The work shall be done under the supervision of the Engineer and shall be prosecuted diligently and in a workmanlike manner, so that reasonably consistent progress may be obtained from commencement to the completion thereof. The sequence of operations will be determined by the Engineer as he shall deem fit to best serve the needs and convenience of the public.

No representations are made by the City, its officers, agents, or employees as to the existence or nature of visible or invisible surface or sub-surface difficulties, obstructions, or obstacles which may be encountered in the course of completing the work covered by the contract, whether shown on the plans or not, and the bid price for the work covered by this contract must cover satisfactory completion thereof on this condition.

Bidders must acquaint themselves with the condition of the ground on and through which the work is to be done to determine whether the excavation may be in rock, hardpan, quick-sand, or soft ground, and the existence and nature of all surface or sub-surface difficulties, obstructions, or obstacles, whether or not shown on plans, and should be familiar with all of the requirements of the Specifications and the Provisions of the Contract and plans of the work so that an intelligent proposal may be submitted.

The foregoing "Official Notice", these "Instructions to Bidders", and the "Specifications", "General Conditions", and "Contract Form" must be considered a part of every proposal submitted and every contract subsequently executed for doing the work referred to herein as fully as though they had been set forth in full in the body of the proposal and contract.

Prior to commencing work the Contractor shall furnish to the City a Certificate of Insurance conforming to the requirement as outlined in Section 2.8.4 of the Standard Specifications for Sewer and Water Construction in Wisconsin.

If any person contemplating submitting a bid for the proposed work is in doubt as to the true meaning of any part of the plans, specifications, or other proposed contract documents, he may submit to the Engineer a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by an addendum duly issued and copies of such addendum will be sent to each prospective bidder.

Any bidder may withdraw his bid at any time prior to the scheduled time for the receipt of bids.

The bidder shall submit his proposal on the form furnished by the Board of Public Works. The proposal shall be executed properly and shall specify a unit price, for each item listed therein, and shall also show in numerals in the column provided for that purpose the products of the respective unit prices and quantities and the total amount of the bid obtained by adding the amounts of the several items. Where alternate bids are asked, a bid on more than one alternate for each item will not be required.

In case of conflict between a bid price and the corresponding extended amount, the bid price shall govern.

All writing shall be with ink or typewriter, except the signature of the bidder, which shall be written with ink.

PART II

GENERAL CONDITIONS

CHAPTER 2.1.0

DEFINITIONS AND TERMS

2.1.1 GENERAL. Whenever in the specifications, or in any documents or instruments in construction operations where the specifications govern, the following abbreviations, terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

2.1.2 ABBREVIATIONS.

- (a) A.A.S.H.T.O. The American Association of State Highway and Transportation Officials.
- (b) ADMINISTRATIVE CODE. Rules of Wisconsin Code.
- (c) A.N.S.I. American National Standards Institute.
- (d) A.R.E.A. The American Railway Engineering Association.
- (e) A.S.M.E. The American Society of Mechanical Engineers.
- (f) A.S.T.M. The American Society of Testing and Materials.
- (g) A.W.W.A. The American Water Works Association.
- (h) D.N.R. Wisconsin Department of Natural Resources.
- (i) FEDERAL SPECIFICATIONS. The specifications of the United States Federal Specifications Board.
- (j) O.S.H.A. Federal Occupational Safety and Health Administration.
- (k) S.S.P.C. Steel Structures Painting Council.
- (l) STATE SPECIFICATIONS. Current Standard Specifications for Road and Bridge Construction of the Wisconsin Department of Transportation.

2.1.3 ADVERTISEMENT. The official notice inviting bids for all proposed improvements included in any one letting.

2.1.4 ADDENDA. All revisions of and supplements to the plans and specifications incorporated in or attached to and becoming an integral part of the Contract Documents.

2.1.5 ARCH. The upper inside section of a sewer or water main above the spring line.

2.1.6 AWARD. The acceptance by the Owner of a bid.

2.1.7 BIDDER. Any individual, firm, partnership or corporation, or a combination of any or all jointly submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.

2.1.8 BOARD. Shall mean the Board of Public Works of the City of Waukesha, Wisconsin.

2.1.9 BUILDING SEWER. A conduit which carries the drainage from a building or private property to a street sewer. Building sewers may be sanitary or storm.

2.1.10 CALENDAR DAY. Every day shown on the calendar, Sundays and Holidays included.

2.1.11 COMPLETION DATE OF CONTRACT. The calendar date shown in the proposal on or before which all the work contemplated under the Contract shall be completed.

2.1.12 COMPLETION DATE OF WORK. Date of completion shall be the date certified by the Engineer or his duly authorized representative.

2.1.13 CONTRACT BOND. The approved form of security furnished by the Contractor and his Surety as a guarantee of good faith on the part of the Contractor to execute the work in accordance with and complying with all the terms and conditions of the Contract Documents.

2.1.14 CONTRACT CHANGE ORDER. A written order by the authorized representative of the Owner covering work not otherwise provided for, revision in or amendments to the Contract, or conditions specifically prescribed in the specifications as requiring contract change orders. Such document becomes a part of the Contract.

2.1.15 CONTRACT DOCUMENTS. All the integral documents of the contract comprised of (a) written agreements (Contract) covering the performance of the work and furnishing of materials for the construction of the improvement; (b) Official Notice; (c) Instructions to Bidders; (d) General Conditions; (e) Specifications; (f) Special Provisions; (g) Proposal; (h) Plans; (i) Schedule of Fixed Prices; (j) Supplemental Agreements; and (k) All Addenda, as fully as though they had been set forth therein full in the body of the contract.

2.1.16 CONTRACT PERIOD. The period from the date of commencing work to the date of completing work, both dates inclusive, as specified in the Contract.

2.1.17 CONTRACT TIME. The number of calendar or working days shown in the proposal representing the time allowed for the completion of work contemplated in the Contract.

2.1.18 CONTRACTOR. Any individual, firm, partnership or corporation or a combination of any or all jointly submitting a proposal to whom the Contract is awarded by the Owner or its heirs, executors, administrators, successors or assigns.

2.1.19 ENGINEER. City Engineer, or Director of Public Works, City Hall, Waukesha, Wisconsin.
OR AN ENGINEER OF A MUNICIPALITY INCLUDING SUCH ASSISTANTS AUTHORIZED TO REPRESENT HIM.

2.1.20 FLOW LINE. The inside bottom of the vertical line of a sewer or water main.

2.1.21 INSPECTOR. The authorized representative of the Owner assigned to make a detailed inspection of any and all portions of work or materials thereof.

2.1.22 INVERT. The lower inside section of a sewer or water main below the spring line.

2.1.23 INVITATION FOR BIDS (OFFICIAL NOTICE). The advertisement for proposals for all work or materials on which bids are required. Such advertisement will indicate with reasonable accuracy the location and character of the work to be done or materials to be furnished and the time and place of submitting the proposals.

- 2.1.24 NOTICE TO PROCEED. A written notice to the Contractor by the Owner's authorized representative of the time within which he shall begin the prosecution of the work.
- 2.1.25 OWNER or CITY. City of Waukesha, Wisconsin
- 2.1.26 PLANS. All contract drawings, reproductions of drawings, sketches and revisions thereof pertaining to the work covered by the contract on file in the office of the Engineer.
- 2.1.27 PROJECT. The entire public improvement proposed by the Owner to be constructed in part or in whole pursuant to the within contract.
- 2.1.28 PROPOSAL. The offer of the Bidder, submitted on the prescribed proposal form, to perform the work including the furnishing of labor and materials at the prices quoted by the Bidder.
- 2.1.29 PROPOSAL FORM. The approved form on which the Owner requires bids to be prepared and submitted for the work.
- 2.1.30 PROPOSAL GUARANTEE. The security furnished with a bid to guarantee that the Bidder will enter into the Contract if his bid is accepted.
- 2.1.31 SANITARY SEWER. A conduit which carries sewage and to which storm, surface and ground waters are not intentionally admitted.
- 2.1.32 SCHEDULE OF FIXED PRICES. The fixed prices as listed in the Contract Documents.
- 2.1.33 SPECIAL PROVISIONS. The special body of directions, provisions or requirements peculiar to a project, and otherwise not thoroughly or satisfactorily detailed or prescribed in the specifications. The requirements of these Special Provisions shall govern the work and shall take precedence over the specifications or plans whenever they conflict.
- 2.1.34 SPRING LINE. The line on either side of a sewer or water main which the invert and arch meet and become tangent to the vertical.
- 2.1.35 STANDARD SPECIFICATIONS. The bound document entitled "Standard Specifications for Sewer and Water Construction in Wisconsin, Fifth Edition, March 1, 1988".
- 2.1.36 WISCONSIN HIGHWAY SPECIFICATIONS. The bound document entitled "State of Wisconsin Department of Transportation Standard Specifications for Road and Bridge Construction Edition of 1981."
- 2.1.37 STORM SEWER. A conduit which carries storm water and surface water, street wash and other wash waters or drainage, but excludes sewage and industrial wastes.
- 2.1.38 SUBCONTRACTOR. The individual, firm, partnership or corporation to whom the Contractor, with the written consent of the Engineer, sublets, assigns or otherwise disposes of any part of the work covered by the Contract Documents.

2.1.39 SURETY. The approved Surety Corporation licensed to do business in the State of Wisconsin bound with and for the Contractor to insure his acceptable performance of the Contract and for his payment of all obligations under the Contract.

2.1.40 WORK. Work shall be understood to mean the furnishing of all labor, materials, equipment and other incidentals necessary or convenient in the successful completion of the project or particular part of the project in accordance with the requirements of the Contract.

2.1.41 WORKING DAY. A calendar day, except Saturday, Sunday and nationally recognized legal holidays where in the opinion of the Engineer, it is possible for the Contractor to start and continue construction operations. Days of inclement weather will not be considered working days. Saturdays, Sundays or holidays are included as working days if "worked".

CHAPTER 2.2.0

NECESSARY NOTICES AND PERMITS

2.2.1 NOTICE TO ENGINEER. The Contractor shall notify the Engineer not less than three (3) working days prior to the date of commencement of open cut work or seven (7) days prior to tunnel work.

2.2.2 NOTICE FOR INSPECTION. The Contractor shall notify the Engineer at least three (3) working days before commencing work or adding another crew so that an inspector can be assigned.

2.2.3 NOTICE TO FIRE, POLICE AND SHERIFF'S DEPARTMENTS. The Contractor shall give written notice to the Fire and Police Departments of the municipality of which the work is being performed and/or to the Sheriff's Department at least twenty-four (24) hours before closing off or in any manner affecting through vehicular traffic on any street.

2.2.4 NOTICE FOR STATE ARTERIAL HIGHWAYS. Whenever the work will obstruct or in any way disrupt vehicular traffic on State arterial highways, the Contractor shall give notice at least three (3) days in advance thereof to the State of Wisconsin, Department of Transportation, Division of Highways, and the Traffic Division of the municipality in which the work is being performed.

2.2.5 NOTICE TO RAILROADS. The Contractor shall notify by registered mail, the District or Division Engineer or persons in charge of the operations of trains for any railroad at least ten (10) days prior to doing any work on the right-of-way or track zone. He shall comply with all rules and regulations requested by the railroad.

2.2.6 NOTICE TO UTILITIES. The Contractor shall give notice in writing to all utilities (such as the gas, electric, telephone, transport company and all other utilities) that may be affected by the Contractor's operations at least three (3) working days before starting work. The Contractor shall not hinder or interfere with any person in the protection of such work, or with the operation of buses, at any time, except with the written permission of the Engineer.

2.2.7 NOTICE TO WAUKESHA METRO TRANSIT SYSTEM. The Contractor will be required to give at least three (3) working days notice to the Waukesha Metro Transit System prior to commencing any work that would in any way interfere with any of the Waukesha Metro Transit System bus routes.

2.2.8 PERMITS AND LICENSES. The Contractor shall procure all necessary permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

2.2.9 NOTICE FOR LOCAL SEWERAGE DISTRICT CONNECTION. The Contractor shall give written notice to the local sewerage district at least three (3) days before cutting into or connecting to any sewerage district intercepting sewer, sewerage district manhole, or watercourse under the jurisdiction of such district.

2.2.10 COPIES OF NOTICES AND PERMITS. Copies of all written notices and permits shall be submitted to the Engineer and Owner prior to the commencement of construction.

CHAPTER 2.3.0

CONTROL OF WORK AND MATERIALS

2.3.1 AUTHORITY OF ENGINEER. All work shall be done in compliance with the Contract Documents. The Engineer shall decide all questions which shall arise as to the quality and acceptability of materials furnished, work performed, workmanship, rate of progress of the work, interpretation of the plans and specifications, acceptable fulfillment of the Contract, compensation, and disputes and mutual rights between Contractors under the specifications. He shall determine the amount of work performed and materials furnished.

2.3.2 AUTHORITY AND DUTIES OF INSPECTORS. Inspectors employed by the Owner shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. The inspector is not authorized to revoke, alter or waive any requirements of the specification, nor is he authorized to approve or accept any portion of the completed project. He shall call the attention of the Contractor to any failure of the work or materials to conform to the specifications and contract, and shall have the authority to reject materials. Any dispute between the inspector and Contractor shall be referred to the Engineer. Any advice which the inspector may give the Contractor shall in no way be construed as binding the Engineer in any way or releasing the Contractor from fulfilling any of the terms of the contract.

2.3.3 PLANS AND SPECIFICATIONS TO BE AVAILABLE. The Contractor shall keep a legible copy of the plans and specifications at the site of the work at all times.

2.3.4 CONTRACTOR'S REPRESENTATIVE. The Contractor shall have at the site of the work at all times, while work is in progress, a superintendent or foreman having authority both to receive orders from the Engineer and to act for the Contractor.

Such representative must be acceptable to the Engineer and must have a thorough understanding of the plans and specifications and must be capable of directing the work as called for in the contract documents.

2.3.5 PERFORMANCE OF THE WORK. All work to be performed must be in accordance with the Contract Documents subject to approval and acceptance of the Owner. Unless otherwise specified in the Contract Documents, the Owner will furnish the Contractor, free of charge, all copies of plans and specifications reasonably necessary to carry out the work.

2.3.6 RIGHT TO SAMPLE AND TEST MATERIALS. When required by the specifications or when called for by the Owner, the Contractor shall furnish the Owner for approval full information concerning the materials or articles which he contemplates incorporating in the work. Samples of materials shall be submitted for approval when so directed.

2.3.7 RIGHT TO WEIGH MATERIALS. The Engineer reserves the right to have any load or material delivered checked for weight at a truck scale; no claim for loss or delay will be allowed on this account.

2.3.8 INSPECTION. All materials and each part or detail of the work shall be subject at all times to inspection by the Engineer or his authorized representatives, and the Contractor will be held strictly to the true intent of the specifications in regard to quality of materials, workmanship, and the diligent execution of the contract. Such inspection may include mill, plant or shop inspection, and any material furnished under these specifications is subject to such inspection. The Engineer or his representatives shall be allowed access to all parts of the work, and shall be furnished with such information and assistance by the Contractor as is determined by the Engineer or his representative, to make a complete and detailed inspection.

The Contractor shall, if the Engineer requests, remove or uncover such portion of the finished work as the Engineer may direct before the final acceptance of the same. After the examination, the Contractor shall restore said portion of the work to the standard required by the specifications. If the work thus exposed or examined proves acceptable, the expense of uncovering or removing and replacing of the parts removed shall be paid for as extra work, but, if the work so exposed or examined is unacceptable, the expense of uncovering or removing and replacing of the same in accordance with the specifications shall be borne by the Contractor.

Failure or negligence on the part of the Engineer to condemn or reject substandard or inferior work or materials shall not be construed to imply an acceptance of such work or materials, if it becomes evident at any time prior to the final acceptance of the work by the Owner. Neither shall it be construed as barring the Owner, at any subsequent time, from the recovery of damages or of such a sum of money as may be needed to build anew all portions of the substandard or inferior work or replacement of improper materials wherever found.

2.3.9 CONTINUOUS WORK. The Contractor shall execute the work only in the presence of the Engineer, or his representative during the working hours of the day unless at his own volition upon due notice to the Engineer and with his approval, he desires to prosecute the work continuously or at night. In all cases, the Contractor shall provide such facilities for carrying on night work as the Engineer directs. No claim will be allowed for extra payment on account of night or continuous work nor for damages or detriment to the quality of work which may be incurred by the Contractor in being permitted to carry on work during such time, it being understood that full compensation for night or continuous work and all expenses incident thereto, are included in the prices for the various items in the contract.

2.3.10 DEFAULT AND COMPLETION OF WORK. The Owner has the right in cases of improper or imperfect performance of the work, or failure to prosecute the work to insure its completion within the time limits specified by the Contract Documents and upon certification of the Engineer that sufficient cause exists to justify action, to give written notice to the Contractor and the Surety stating said default. If the Contractor does not remedy such default within ten (10) days after such notice is given, the Owner has the right to suspend all work by the Contractor. When the Contractor and Surety are notified that the Owner has elected to suspend the work, the Contractor shall cease to have the right to occupancy of the work site, and the Owner shall have the right to forthwith take possession of the work site. The Surety shall have the right to complete the contract, but in the event that performance has not been commenced by the Surety within ten (10) days from the date of the notice of suspension, the Owner has the right to continue in the possession of and utilize, for the completion of the contract, any and all materials, tools, equipment and plant which the Contractor has had delivered upon the site of the work, and to prosecute the work to the completion, either by force account or by contract.

Expenditures made by the Owner in completing the work under the contract and in payment of valid claims arising under the terms of the contract shall be deducted from monies due or which would have become due the Contractor upon completion of the contract. No claims for "extras" arising from the Owner's actions in completing the work will be allowed. The Contractor and Surety shall be liable and shall reimburse the Owner for any costs, in excess of the contract amount, required to complete the work.

2.3.11 ASSUMPTION OF CONTROL OF WORK NOT A WAIVER. Neither an extension of time for any reason beyond that fixed in the contract for the completion of the work, nor the performance nor acceptance of any portion of the work as called for in the contract documents, nor any partial payment made on account of work done, nor the use of any portion of the work by the Owner, shall be deemed a waiver by the Owner of its rights to assume control of the work done in the manner above set forth, nor be any excuse for the Contractor or Surety to fail to fulfill all the stipulations set forth or reasonably implied in the Contract Documents.

2.3.12 WORKMANSHIP. All workmanship shall conform to the best standard practice. Unless otherwise specified, the specifications of recognized association of manufacturers and Contractors or industrial manufacturers shall be used as guides for the standards of workmanship.

All exposed items of work shall present a neat workmanlike appearance and shall be as true to shape and alignment as is possible to obtain with measuring or leveling instruments generally used in the respective types of work. Items of work shall be sound and fully protected against damage and premature deterioration. It is specifically understood that in all questions of quality and acceptability of workmanship, the Contractor agrees to abide by the decisions of the Engineer.

The Contractor shall furnish all labor, materials, necessary tools, equipment and accessories that are necessary for integrating all portions of the work included in the Contract to fulfill the true purpose and intent of the Contract.

2.3.13 PARTIAL ACCEPTANCE. When requested by the Contractor and upon specific approval of the Engineer, prior to final inspection and acceptance, the Contractor may be relieved of maintenance of sections of the work which have been completed. Such partial acceptance and assumption of the maintenance by the Owner shall be covered by a written notice from the Engineer to the Contractor, and such notice shall definitely designate the sections of the work on which the Contractor is to be relieved of maintenance and shall also set forth the date upon which such notice will be effective.

The assumption of maintenance by the Owner, however, will not relieve the Contractor of any responsibility for defective workmanship or materials or for damages caused by his own operations.

Such action shall not be construed to be a final inspection or acceptance of any part of the work nor waiver of any legal rights.

2.3.14 FINAL ACCEPTANCE. The Engineer will make an inspection of the work included in the Contract as soon as practical after notification by the Contractor and confirmation by the Inspector that such work has, in their opinion, been completed and final cleanup performed.

Should the inspection disclose any work, in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of the same, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed.

When all work included in the Contract has, in the opinion of the Engineer, been completed, the Owner will make the final acceptance and will certify the date of completion of work.

2.3.15 CLEANING OF SEWERS AND APPURTENANCES. The interior of all sewers, manholes and inlets affected by the work shall be freed from all dirt and extraneous materials of all types as the work progresses and left clean at the completion of the work embraced in the Contract.

2.3.16 SOURCE OF SUPPLY AND QUALITY. The specifications contemplate the use of new, high quality materials throughout the work, except as may specifically be provided elsewhere in the specifications, on the plans, or in the Special Provisions, incorporated in the work in a manner to produce completed construction which is acceptable in every detail.

Only previously tested and/or approved materials shall be incorporated in the work; however, some manufactured products normally used in the large quantities immediately upon or soon after delivery to the project may, with permission of the Engineer, be incorporated in the work when they are furnished from sources deemed by the Engineer to have a proven record of furnishing materials complying with specification requirements. The permitted use of an untested material shall not, however, be construed as implied approval of the material, and such use shall be at the Contractor's risk.

When fabricated materials are obtained by the Contractor from commercial sources, the materials, manufacturer and supplier thereof shall, at the Engineer's discretion, be subject to his approval before delivery of the material to the job site. Furthermore, the Contractor may be required to obtain material from another approved source, if it is determined that the product of a manufacturer or supplier is not of satisfactory uniformity or consistent quality.

In the case of materials obtained or produced from natural deposits, either commercially or by the Contractor, the Contractor shall obtain the Engineer's preliminary approval of the source. The Contractor shall furnish samples as required, representative of the material proposed for the work, in sufficient time to permit testing as necessary to establish a basis for approval. Such samples shall be obtained under the observation of and with methods approved by the Engineer. Tests will be made on these preliminary samples and reports rendered, but it is to be understood that such tests are for information only and that any preliminary approval based thereon shall not be construed as a guarantee of acceptance of any material which may be delivered later for incorporation into the work.

The Contractor shall assume full responsibility for the furnishing of uniform and satisfactory materials. When materials are obtained from local deposits, the Contractor shall be responsible for any losses or damages resulting from the opening and operation thereof, or from the failure of the deposit after development to produce acceptable materials.

2.3.17 DEFECTIVE MATERIALS. All materials not conforming to the requirements of the Contract Documents shall be considered as defective and all such materials, whether in place or not, shall be rejected and shall be removed from the work by the Contractor at his expense. Upon failure on the part of the Contractor to comply with any order of the Engineer relative to the provisions of this article, the Engineer shall have authority to remove and replace such defective material and to deduct the cost of removal and replacement from any monies due or which may become due the Contractor.

2.3.18 SCALES FOR WEIGHING MATERIALS. All scales used the weighing of materials to be used in the work shall have been tested by a Sealer of Weights and Measures and shall bear a current stamp of approval.

2.3.19 EMPLOYEE QUALIFICATIONS. The Contractor shall employ only such foremen, mechanics, laborers or other employees as are physically fit, competent, experienced and qualified to handle each class of work on which they are employed.

2.3.20 EMPLOYEES TO BE REMOVED FOR CAUSE. When any employee is abusive or disrespectful to the general public or to the Owner's representatives, such employee shall, upon written order from the Owner, be removed from the work.

2.3.21 PROSECUTION OF WORK. When the public interest necessitates, the Engineer may determine the place of commencement and the sequence of operations of the Contractor. At any time, when in the judgment of the Engineer, the Contractor has obstructed or closed a street or is carrying on operations of a greater portion of the Contract than is necessary for the proper prosecution of the work, the Engineer may require the Contractor to finish the sections on which work is in progress before work is started on any additional section.

CHAPTER 2.4.0

CARE AND STORAGE OF MATERIALS

2.4.1 STORAGE OF MATERIALS. Materials delivered for the Contractor are to be neatly and compactly placed along or near the site in such manner as to cause the least inconvenience to the Property Owners and insure the safety of the general public. Materials shall not be placed within twenty (20) feet of any hydrant, pedestrian crossing or intersection.

2.4.2 RESPONSIBILITY FOR MATERIAL FURNISHED BY OWNER. The Contractor shall be responsible for the care and protection of all material furnished to the site of the work by the Owner.

The Contractor shall inspect all of this material and shall immediately notify the Engineer if any is defective. The Owner will substitute new material for any accepted as sound by the Contractor, but found defective after installation; however, the Contractor shall remove the defective material and install all the replaced material at his own expense, furnishing all the labor, supplies and facilities necessary to complete the work in accordance with the specifications.

CHAPTER 2.5.0

SCOPE OF WORK AND SPECIFIC INSTRUCTIONS

2.5.1 INTENT OF CONTRACT DOCUMENTS. The true intent of the Contract Documents is to provide for the construction, execution and completion in every detail of a complete work or improvement which the Contractor undertakes to do in full compliance with the Contract Documents and in accordance with recognized engineering and construction principles. The Contractor shall perform all items of work covered and stipulated in the Proposal and perform altered and extra work, all in accordance with the lines, grades, typical sections, and dimensions given, and shall furnish, unless otherwise provided in the Contract Documents, all materials, implements, machinery, equipment, tools, supplies, transportation, electric power and labor necessary to the prosecution and completion of the work.

2.5.2 CLEANING UP WORK. The Contractor shall at all times keep the site of the work, including all private or public property involved in or adjacent to the work, free from any rubbish, surplus or waste materials deposited by persons engaged in the work or which have accumulated as a result of the work.

The Contractor shall remove all surplus materials, tools, equipment or plant, leaving the site of the work and all portions of the finished work clean, unobstructed and ready for use before the work will be considered completed. After written notification, the Engineer may have removed from the site of the work all rubbish, surplus or waste materials which the Contractor has neglected or refused to remove and deduct the costs of such removal from any monies due the Contractor.

2.5.3 LOCATION OF UNDERGROUND STRUCTURES. It is the responsibility of the Contractor to acquaint himself with the location of all underground structures which may be encountered or which may be affected by work under the contract.

The locations of any underground structures furnished, shown on the plans or given on the site are based upon the available records, but are not guaranteed to be complete or correct and are given only to assist the Contractor in making a determination of the location of all underground structures.

2.5.4 COOPERATION WITH OTHER CONTRACTORS. The Contractor shall work in harmony with other Contractors, or with Utility or Owner's forces engaged in collateral work. In case of dispute, the decision of the Engineer shall be final and binding upon the parties affected.

2.5.5 WORK TO BE DONE AT CONTRACTOR'S RISK. All work to be done under the contract documents from the commencement until the final acceptance of such work shall be done entirely at the Contractor's risk. No partial payment for, or partial acceptance of, any part of the work shall absolve him from such risk.

2.5.6 ITEMS NOT LISTED IN "ESTIMATE OF QUANTITIES". Sundry items which are incident to or required in the construction of the work but are not included as items in the estimate of quantities shall be considered an integral part of the contract, and all labor materials, etc. required for such items shall be furnished by the Contractor and the cost included in the unit price bid for other items of work.

2.5.7. OMISSION, DISCREPANCIES AND CORRECTIONS. It is the intent of the Contract Documents that all performance under the contract be in accordance with the best practice. The Contractor shall carefully check the plans both before commencing and throughout the work. He shall immediately call the Engineer's attention to any errors, omissions or discrepancies that he may discover in the plans before proceeding with the work affected. The Engineer reserves the right to make such corrections as he may deem necessary for the fulfillment of the true intent of the Contract Documents.

2.5.8 SUBSTITUTION OF MATERIALS. The Contractor may submit plans and specifications for a type of material other than those covered by the Contract Documents, provided they conform to the requirements of the Contract Documents covering the particular type of materials for which a substitute is proposed. In all cases, however, the plans and specifications for the proposed substitution must be approved by the Engineer in writing.

In the event of such substitution, the Owner will require from the Contractor a credit deduction from contract amount equal to any saving in material cost resulting from use of the proposed substitute. The name of the manufacturer and location of the plant must be furnished along with the proposal for the use of any substitute.

CHAPTER 2.6.0

EXTRA WORK AND CREDITS

2.6.1 REVISION OF PLANS. If the Owner deems it proper or necessary in the execution of the work to make any alteration which will increase or diminish the quantity of labor or materials, or the cost of the work, such alteration shall not annul or vitiate the contract or agreement, nor release the Surety. The Contractor shall furnish the necessary labor, material, etc. to complete the contract as altered within the time limit originally specified or as extended by the Engineer. Additions or deductions need not be accepted by the Contractor if the total cost of the additions or deductions exceeds fifteen percent (15%) of the total cost of the project as originally bid by the Contractor. The value of the work so added or omitted shall be added or deducted from the amount otherwise due the Contractor, as the case may be, and shall be determined in accordance with the methods described in Section 2.6.3.

2.6.2 AUTHORITY FOR ALTERED WORK. No extra work of any kind will be allowed unless ordered in writing by the Engineer prior to commencing work which will entail such extras. No verbal orders shall be construed as authorizing or laying the foundation for extra compensation for either extra work or materials, or for damages because of said Contractor's compliance therewith. Verbal orders or suggestions may be given from time to time, as to the performance of the work, but in case they appear to the Contractor to involve extra work for which he should receive extra compensation, he must ask for the regular written order.

In the event of any disagreement as to the amount of work involved under any authorized order for extra work, it is hereby agreed that the decision of the Engineer shall be binding and conclusive.

2.6.3 BASIS OF PAYMENT OR CREDIT FOR ALTERED WORK. The method of determining the basis of payment or credit resulting from such altered work shall be:

- (a) Unit bid prices for the particular item as established in the original contract or the schedule of fixed prices.
- (b) For such items for which unit prices have not been established in the contract, by agreement with the Contractor following a request by the Engineer for a written quotation for the item of work to be performed or the elimination of an item of work.
- (c) If an agreement cannot be made between the Contractor and the Engineer for items of work for which unit prices are not set forth in the contract, then the value shall be determined by using the actual cost of labor, materials and insurance plus fifteen percent (15%) for superintendence, general expenses and profit, plus equipment rental at fair market rates.

Claims for such work will not be considered unless the Contractor presents to the Engineer's representative a daily itemized statement in duplicate of the hours of labor, quantities of materials, etc. upon which payment is to be based. The Engineer's representative on the work will check such amounts daily and will retain the original for the Engineer and return the copy to the Contractor. The approval of such items by the Engineer's representative, shall not in itself, however, be construed as authorizing or accepting such claims. No claims will be considered until the original bills, receipts or vouchers have been furnished to the Engineer by the Contractor.

CHAPTER 2.7.0

PROTECTION OF WORK - PUBLIC AND PRIVATE

2.7.1 PROTECTION OF WORK. During the performance and up to the completion date of work, the Contractor shall be under an absolute obligation to protect finished and unfinished work against any damage, loss or injury; and in the event of such damage, loss or injury, he shall promptly replace or repair such work, whichever the Engineer shall determine to be preferable.

2.7.2 PROTECTING OPENINGS. Adequate protection shall be provided around all openings wherever required to safeguard the work or the public. All openings and surface obstructions shall be protected with barricades, signs and warning devices in accordance with local requirements.

2.7.3 STREET BARRICADES, SIGNS AND WARNING DEVICES. The Contractor shall provide adequate signs, barricades and flashers to properly close off and protect the construction area. (See also Chapter 3.2.0)

2.7.4 FLAGMAN REQUIRED. Whenever the Contractor's operations obstruct or endanger a traffic lane, and no marked detour has been provided, he shall furnish a flagman to direct traffic through or around the congested area. The Engineer shall have the right to require additional flagmen as he may deem necessary.

2.7.5 REMOVAL OF SNOW. The Contractor shall be responsible for immediate removal of snow from those sections of streets which he has obstructed.

2.7.6 ACCESS TO PROPERTIES. The Contractor shall neither shut off nor unnecessarily interfere with either pedestrian or vehicular access to property without the consent of the Engineer.

2.7.7 PROTECTIVE PRIVATE PROPERTIES. All private properties shall be fully protected by the Contractor. All trees, bushes, shrubs, sod, etc. on private property damaged by the Contractor shall be repaired or replaced by the Contractor at no cost to the private Owner, and to the satisfaction of the Engineer.

2.7.8 PROTECTION OF ADJOINING PROPERTY AND BUILDINGS. Unless waived by adjoining Owners, at least thirty (30) days prior to commencing the excavation, the excavator shall notify, in writing, all Owners of adjoining buildings of his or her intent to excavate. The notice shall state that the adjoining buildings may require permanent protection. The Owners of adjoining property shall have access to the excavation site for the purpose of protecting their buildings, all in compliance with Section 101.111 of the Wisconsin Statutes. In this section "excavator" means any Owner of an interest in land making or causing an excavation to be made.

2.7.9 ACCESS TO PUBLIC AND PRIVATE FACILITIES. Access must always be maintained to fire hydrants, fire alarm and police call boxes, water and gas gate valves, catch basins, and sewer, water, utility and other manholes. Whenever access to any such facility shall have been obstructed or interfered with during the progress of the work, the Contractor must immediately remove at his own expense such obstruction or interference.

2.7.10 TRAFFIC. The Contractor shall maintain vehicular traffic as specified in the contract documents or as otherwise directed by the Engineer.

2.7.11 WORK IN PRIVATE RIGHT-OF-WAY. Whenever the work is to be prosecuted through private property for which the Owner has obtained a license or an easement, the Contractor must abide fully with the terms of the license or the easement, a copy of which is on file with the Owner.

2.7.12 APPROVAL OF EASEMENT RESTORATION. Prior to final payment, the Contractor shall send a notice to all easement grantors by certified mail, return receipt requested, a copy of which shall be filed with the Owner, said notice to be similar to the following:

The undersigned Contractor has completed the restoration of the construction site on which you have granted an easement for installation of certain utilities and improvements. If said site restoration is not completed to your satisfaction, please contact (name of Engineer, address and name of municipality) in writing and arrangements will be made immediately to view the site and restore the site in conformance with our contract obligations.

If (name of Engineer, address, name of municipality) does not hear from you in writing within ten days from the above date, site restoration of your property will be deemed completed and approved by you.

(Name of Contractor)
(Address of Contractor)

Owner shall furnish Contractor with names and addresses of easement grantors.

Upon receipt of a notice of deficiency, the Owner or his representative will examine the site, and direct the Contractor to complete all work which may be necessary to satisfy the terms of the contract. Should the Contractor refuse to comply, the Owner reserves the right to have the work done by contract or force account and deduct the cost thereof from the monies due the Contractor. Should conditions exist which preclude the Contractor from completing satisfactory restoration, the Owner may require the Contractor to furnish a bond in a sum sufficient to cover any legal claims for damages. When the Owner is satisfied that the work has been completed in agreement with the Contract Documents and the terms of the license or easement, he reserves the right to waive the requirement of obtaining the statement.

2.7.13 SANITARY PROVISIONS. The Contractor shall provide and maintain properly sheltered sanitary conveniences for his employees, and their use must be strictly enforced.

2.7.14 EMERGENCY MAINTENANCE AND PROTECTION. In the event it becomes necessary for the Owner to perform emergency maintenance and protection, which is the responsibility of the Contractor under the contract documents, the cost of such work shall be billed to the Contractor and deducted from his final payment if not paid.

CHAPTER 2.8.0

LEGAL RELATIONS

2.8.1 LAWS TO BE OBSERVED. The Contractor, his agents and employees, shall at all times observe and comply with all Federal and State laws, local laws, ordinances, codes and regulations which in any manner affect the conduct of the work and all such orders or decrees as exist at the present and which any be enacted later, or bodies or tribunals having jurisdiction or authority over the work. He shall protect and save harmless the Owner, its officers and representatives, against any claim or liability arising from the violation of any such law, ordinance, code, regulation or order.

2.8.2 SUBCONTRACTING. The Contractor shall not subcontract any work to be performed without the written consent of the Owner. If the Contractor shall sublet any part of this contract, the Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractor and of the persons either directly or indirectly employed by his subcontractor as he is for the acts and omissions of persons directly employed by himself.

Neither the approval, endorsement of the Engineer nor anything contained in the contract documents shall be construed as creating any contractual relationship between any subcontractor and the Owner.

The Contractor hereby agrees to bind every subcontractor, and every subcontractor in turn to be bound to the Contractor, by such terms of the contract documents as are in any measure pertinent to his work.

2.8.3 PATENTS AND TRADE SECRETS. It is hereby expressly agreed that alleged Ownership, by any Contractor or by any subcontractor, of trade secrets as to materials or mixtures used in any part of the work, or the preparation of any work mixtures for such work, shall not be recognized by the Owner in the performance of this contract.

It is also mutually understood that, without exception, contract prices are to include all royalties and cost arising from patents, trademarks and copyrights in any way involved in the work. The Contractor and the Surety in all cases shall indemnify and save harmless the Owner from any and all claims for infringement by reason of the use of any such patent design, device, material or process to be performed under the contract, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay, by reason of such infringement at any time during the prosecution of the work.

2.8.4 LIABILITY AND INSURANCE. The Contractor and the Surety will be held responsible for and shall save the Owner harmless from all liability for damages occasioned by the digging up, use or occupancy of the street, alley, highway, public grounds and private grounds or which may result therefrom, or which may result in any way from the negligence or carelessness of the Contractor, his agents, employees or workmen; or by reason of the elements, unforeseen or unusual difficulties, obstructions, or obstacles encountered in the prosecution of the work; and they shall indemnify the Owner for and save it harmless from all claims and liabilities, actions and causes of action, and liens for materials furnished or labor performed in the construction or execution of the work, and from all costs, charges and expenses incurred in defending such suits or actions, and from and against all claims and liabilities for injury or damage to persons or property emanating from defective or careless work methods, or from and against all claims or liabilities for royalties, license fees, actions, suites, charges and expenses or damage from infringement for reason of the use of any invention or improvement in tools, equipment or plant or any process, device or combination of devices used in the construction of the work.

The Contractor shall not commence work under a contract until he has obtained all insurance required under this paragraph and has filed certificates thereof with the Owner, nor shall the Contractor allow a subcontractor to commence work until all similar insurance required has been so obtained and filed.

- (a) WORKMEN'S COMPENSATION INSURANCE. Statutory coverage as required by Chapter 102 of the Statutes of the State of Wisconsin's, as revised, and all acts amendatory thereof and supplementary thereto, and for all employees of the Contractor. All subcontractors and material men shall furnish to the Contractor and the Owner evidence of similar insurance for all of their respective employees unless such employees are covered by the protection afforded by the Contractor.
- (b) COMPREHENSIVE GENERAL LIABILITY AND PROPERTY DAMAGE INSURANCE. Coverage to include premises and operations; Contractors' protective insurance; products and completed operations coverages; contractual -- including sole negligence coverage; underground and collapse coverage; all subject to the following limits:

| | |
|-----------------|----------------------------|
| Bodily Injury | \$1,000,000 Per Occurrence |
| | \$1,000,000 Aggregate |
| Property Damage | \$ 500,000 Per Occurrence |
| | \$ 500,000 Aggregate |

- (c) COMPREHENSIVE AUTOMOBILE LIABILITY AND PROPERTY DAMAGE. Operations of Owner, hired and non-owned motor vehicles:

Bodily Injury-Property Damage (Combined Single Limitation) \$1,000,000

The Contractor shall file with the Owner a certification of insurance containing a ten (10) day notice of cancellation.

NOTE: The required limits of liabilities may be obtained with primary liability policies or in combination with an umbrella excess third party liability policy.

2.8.5 CONTRACT BOND. The Contractor shall furnish and pay for the premium for a payment and performance contract bond by a Surety.

The amount of the bond required of the awarded contract shall be for the full amount of the contract and shall be adjusted to incorporate all extras, credits and change orders through final payment.

2.8.6 "OR EQUAL" CLAUSE. Whenever in any of the contract documents an article, material, or equipment is defined by describing a proprietary product or by using the name of a manufacturer or vendor, the term "or equal", if not inserted shall be implied. The specific article, material, or equipment mentioned shall be understood as indicating the type, function, minimum standard of design, efficiency, quality desired, and shall not be construed in such a manner as to exclude manufacturers' products of comparable quality, design, and efficiency. The Contractor shall comply with the requirements of the contract documents relative to an Owner's approval of materials and equipment before they are incorporated in the project.

CHAPTER 2.9.0

PARTIAL PAYMENTS AND FINAL PAYMENTS

2.9.1 RETAINED PERCENTAGES. As the work progresses under any contract involving \$1,000 or more for the construction, execution, repair, remodeling or improvement of any public work or building or for the furnishing of any supplies or materials, whether or not proposals for which are required to be advertised by law, the municipality, from time to time, shall grant to the Contractor an estimate of the amount and proportionate value of the work done, which shall entitle the Contractor to receive the amount thereof, less the retainage, from the proper fund. On all such contracts, the retainage shall be an amount equal to ten percent (10%) of said estimate until fifty percent (50%) of the work has been completed. At fifty percent (50%) completion, further partial payments shall be made in full to the Contractor and no additional amounts may be retained unless the Architect or Engineer certifies that the job is not proceeding satisfactorily, but amounts previously retained shall not be paid to the Contractor. At fifty percent (50%) completion or any time thereafter when the progress of the work is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than ten percent (10%) of the value of the work completed. Upon substantial completion of the work, an amount retained may be paid to the Contractor. When the work has been substantially completed except for work which cannot be completed because of weather conditions, lack of materials or other reasons which in the judgement of the municipality are valid reasons for noncompletion, the municipality may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the work still to be completed or in the alternative may pay out the entire amount retained and receive from the Contractor guarantees in the form of a bond or other collateral sufficient to insure completion of the job. For the purposes of this section, estimates may include any fabricated or manufactured materials and components specified, previously paid for by Contractor and delivered to the work or properly stored and suitable for incorporation in the work embraced in the contract.

2.9.2 FINAL QUANTITIES. Upon completion of the work, the Engineer shall transmit to the Contractor the final pay quantities.

2.9.3 ACCEPTANCE AND FINAL PAYMENT. When the project has been finally accepted as provided in Section 2.3.14, Final Acceptance, the Engineer will prepare the final estimate of the quantities and the various classes of work performed. The Contractor shall then be paid the entire sum found to be due after deducting all previous payments and all amounts to be deducted under the provisions of the contract.

All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

The acceptance by the Contractor of the "Final Payment" provided for in the contract shall operate as, and shall be, a release to the Owner and its representatives from all claims by the Contractor for anything done or furnished for or relating to the work, or for any act or neglect of the Owner or of any person relating to or affecting the work.

2.9.4 AFFIDAVIT OF COMPLIANCE - PREVAILING WAGE RATES. Prior to final payment, the Contractor shall furnish affidavits necessary to comply with prevailing wage rates per Section 66.293 of Wisconsin Statutes.

CHAPTER 2.10.0

PROSECUTION AND PROGRESS

2.10.1 PROSECUTION OF THE WORK. The Engineer will notify the Contractor of the date to commence work covered by the contract. Upon receipt of such notice, the Contractor shall comply with all notice requirements.

When the contract is divided into several streets or sections, work on another section shall not begin until permission to do so has been given by the Engineer.

2.10.2 TEMPORARY SUSPENSION OF WORK. The Engineer shall have authority to suspend the work wholly or in part for such period or periods as he may deem necessary, due to unsuitable weather or such conditions as are considered unfavorable for the suitable prosecution of the work or for such time as it is necessary due to the failure on the part of the Contractor to carry out orders given or perform any and all provisions of the contract.

2.10.3 EXTENSION OF CONTRACT TIME FOR COMPLETION. The time for completion of the work contemplated will be as herein specified and it is understood that the completion of the work within the time specified is an essential part of this contract.

If the Contractor finds it impossible to complete the work on or before the time specified for completion, he may make written request for extension of time. He shall set forth fully in his request the reasons he believes justify the granting of his request.

If the Owner finds that the work was delayed because of conditions beyond the control of the Contractor, such as strikes, severe shortages of building materials, extended periods of inclement weather, or for other reasons authorized by the Engineer, or that quantities of work done or to be done are in excess of the estimated quantities by an amount sufficient to warrant additional time, the Owner may grant an extension of time for completion as appears reasonable and proper. The extended time for completion shall then be considered as in full force and effect as if it were the original time for completion.

2.10.4 FAILURE TO COMPLETE WORK ON TIME. Should the Contractor or the Surety fail to complete the work within the time agreed upon or within such extra time as may be allowed by extensions, there shall be deducted from any monies due or that may become due the Contractor or Surety the sum set forth in the contract documents for each and every calendar day, including Sundays and holidays, that the work shall remain uncompleted. This sum shall be considered and treated not as a penalty but as fixed, agreed and liquidated damages due the Owner from the Contractor or Surety by reason of inconvenience to the public, added cost of engineering and other costs incurred resulting from his failure to complete the work within the time specified.

Permitting the Contractor or Surety to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, shall in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

2.10.5 CONTRACTOR TO BE CHARGED FOR INSPECTION AFTER TIME ALLOWED FOR COMPLETION HAS EXPIRED. The Contractor will be charged for each and every day inspection is required on all construction projects after the time allowed for completion has expired. This per diem rate for inspection will include the cost of inspection, construction supervision, clerical and administrative costs, traffic control, vacations, pensions, holidays, overtime and other similar overhead charges. This charge for inspection will be deducted from monies due the Contractor at the completion of the contract. The amount of the per diem charge will be set forth in the specifications.

An inspector will be assigned to the project upon notice from the Engineer to the Contractor to start work. Inspection will be continuous until, in the judgement of the Engineer, the project is complete. This period of time will include all construction operations, including cleaning of work site.

A working day shall be any day which in the opinion of the Engineer it is possible for the Contractor to start or continue construction operations. Days of inclement weather will not be considered working days.

When the Contract Documents require completion of the contract by a specific date, all work including clean up of the work site must be complete by that date.

The decision of the Engineer shall be considered final in all matters pertaining to the necessity for inspection and the number of inspectors required on the construction project.

PART III
GENERAL SPECIFICATIONS

CHAPTER 3.1.0

APPLICABILITY AND PROCEDURES FOR OBTAINING PERMISSION TO WORK IN R.O.W.

3.1.1 APPLICABILITY OF REGULATION. The provisions herein have been adopted by the Board of Public Works and shall apply to:

- a. All municipal forces
- b. All Contractors working within the City of Waukesha.
- c. All Contractors or employees of any public or private Utility working within the City of Waukesha.

The provisions of this regulation shall apply over all street right-of-ways within or under the jurisdiction of the City of Waukesha, including the street pavement, terrace area or grass plot, and sidewalks. They shall also apply to any sidewalk or other area so closely adjacent to the street right-of-way as to create a hazard for the public, and to any city owned property.

3.1.2 PROCEDURES FOR OBTAINING PERMISSION TO WORK IN CITY STREETS.

- A. It is required that all Contractors working within the street right-of-way apply for a street opening permit prior to the beginning of work. This permit can be obtained from the Office of the Director of Public Works at Waukesha City Hall.
- B. All Contractors or Utilities will be required to notify the Fire Department of any street closing prior to the beginning of work, and upon completion of the work.
- C. All public and private Utilities wishing to work within the street right-of-way must submit their request in writing at least 10 days prior to the meeting of the Common Council. (The Common Council meets on the first and third Tuesday of each month.) This applies to all work except lateral construction and emergency repairs. In the case of emergency repairs, it will be necessary to notify the Office of the Director of Public Works on the first working day following the emergency work.
- D. All Contractors and Utilities will be required to apply to the Building Inspector for a Street Occupancy Permit before obstructing any sidewalk or street for the purpose of storage of equipment and materials or the erection of a scaffolding.

Chapter 3.2.0

GENERAL PROVISIONS FOR WORKING WITHIN R.O.W.

3.2.1 ARTERIAL STREET. No opening that in any way obstructs a moving lane of traffic on any arterial street will be permitted without 24 hours notice to the Engineering Department and Police Department.

3.2.2 NOTICES. In compliance with Chapter 2.2.0.

3.2.3 TRAFFIC DETOUR ROUTE. The City of Waukesha will be responsible for the marking and signing of any traffic detour required for City contracts. The Contractor will be required to give adequate notice for preparing the detour. For all other work, the Contractor or Utility shall mark and sign any detour approved by the City Engineering Department. Permission must be obtained in advance and proper notice must be given to the City Engineering Department and to the Waukesha Police Department.

3.2.4 PEDESTRIAN DETOUR ROUTE. If a pedestrian detour route is required, it shall be constructed, maintained, and signed by the Contractor or Utility as directed by the Police Department or the Engineering Department. A street occupancy permit must be obtained from the Building Inspection Department for occupying any public sidewalk.

3.2.5 STREET OR INTERSECTION CLOSED TO THROUGH TRAFFIC. When a street or intersection is closed to through traffic, the Contractor, Municipal Department, or Utility shall place a partial barricade with a flasher and street closed sign, one block away on either side of the closed street or intersection.

3.2.6 EQUIPMENT AND MATERIALS NOT TO BE USED AS BARRICADING. A Contractor, Municipal Department, or Utility will not be allowed to use construction equipment or stockpiled materials for the purpose of barricading the work. In addition, any equipment or stockpiled materials which are parked or stored within the R.O.W. shall be appropriately barricaded so as to not create a hazard.

3.2.7 SIGNS, BARRICADES, FLASHERS, ETC. The Contractor, job superintendent, or foreman, on the job at any given time will be responsible for providing, placing, and maintaining such barricades, drums, rubber cones, signs, lights, flashers, delineators, flags and flagmen as may be required by the Police Department and Engineering Department.

3.2.8 STANDARDS FOR SIGNS AND FLASHERS. Signs and flashers shall conform to Wisconsin Highway Specification Minimum Standards.

3.2.9 BRIDGING OF TRENCHES. In areas of high volume traffic bridging of trenches may be required. Where required, the bridging of trenches is to be accomplished with steel plates which are anchored against movement and ramped at the edges.

3.2.10 CITY OWNED SIGNS AND BARRICADES. Signs and barricades which are owned by the City of Waukesha will not be available for use by Contractors or Utilities. In the event that special signs are required for the project the Contractor may purchase them from the City of Waukesha at cost plus handling charges.

CHAPTER 3.3.0

SPECIFIC REQUIREMENTS FOR WORKING WITHIN R.O.W.

3.3.1 DRAINAGE. The Contractor or Utility shall be responsible for providing and maintaining adequate drainage facilities as may be necessary to effectively protect both public and private property. The sanitary sewer system shall not be used to facilitate adequate drainage.

3.3.2 SANITARY PROVISIONS. As required in Section 2.7.13.

3.3.3 LINES AND GRADES. The Contractor shall give seventy-two (72) hours notice in writing when he shall require the service of the Engineer for laying out any portion of the work, and he shall clearly state in such notice the exact locality where such stakes are needed for immediate use.

The Contractor must satisfy himself before commencing as to the meaning and correctness of all stakes and marks and no claim will be entertained by the City for or on account of any alleged inaccuracies or for alterations subsequently rendered necessary on account of such alleged inaccuracies, unless the Contractor notifies the Engineer thereof in writing before commencing work thereon. The Contractor will be held responsible for the preservation of all such stakes and marks in their proper position and in case any are disturbed, he shall at once notify the Engineer in writing. The Contractor must be careful to see that the work is according to line and grade and in case he discovers an error, he shall at once discontinue work and notify the Engineer, but no claim shall be made or allowed on account of any delay occasioned thereby.

The Contractor is to furnish the Engineer with any reasonable assistance which he may require at any time to help in driving stakes or in setting out this work. He shall also furnish the Engineer or any of the Inspectors with all required assistance to facilitate thorough inspection or culling over or removing defective materials or for thorough examination into any of the work performed or for any other purpose required in the discharge of their respective duties, for which service, no additional allowance will be made.

3.3.4 TESTS. All required tests are to be made in conformance with the latest A.S.T.M. methods of tests or other applicable procedures.

3.3.5 TEST REPORTS. Where required test reports shall be supplied. The test reports shall provide satisfactory documentary evidence that the materials or procedures which have been incorporated into the project are acceptable for the intended use. Materials which have not met the appropriate standards shall be immediately removed from the job site and replaced with acceptable materials.

CHAPTER 3.4.0

FAILURE TO COMPLY

3.4.1 FAILURE TO COMPLY. Failure to comply with applicable rules, regulations and laws shall be just cause for revocation of permission to work within the right-of-way. Upon revocation of permission to work within the right-of-way the City will take over the work and properly barricade or remove the obstruction. This work will be charged to the Contractor or Utility on a time and material basis.

3.4.2 LOSS OF RIGHT TO OCCUPY JOB SITE. The loss of right of a Contractor or Utility shall not release the Contractor or Utility from any legal actions which were caused by his negligence or failure to comply with applicable rules, regulations and laws.

PART IX

STORM AND SANITARY SEWERS AND FORCE MAINS

CHAPTER 9.1.0

REQUIREMENTS

9.1.1 GUARANTEE. All work shall be and is guaranteed for a period of one (1) year from and after the completion date of work. If, within said guarantee period, repairs or changes are required in connection with the work, which in the opinion of the Engineer is rendered necessary as the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, the Contractor shall promptly, upon receipt of the notice from the Engineer, and without expense to the Owner, restore the work to a satisfactory condition, correct all defects, make good all damage to the structure, site or contents thereof, which damage, in the opinion of the Engineer, results from the use of such inferior or defective materials, equipment or workmanship.

If within ten (10) days after notice the Contractor fails to comply with the terms of any guarantee herein contained, the Owner may have the defects corrected and the Contractor or his Surety shall be liable for all expenses incurred; except when, in the opinion of the Engineer, delay in correcting the defects would cause serious cost or damage, repairs may be made by the Owner without notice being given to the Contractor and the Contractor shall pay the cost thereof.

All special guarantees or warranties applicable to specific parts of the work as may be stipulated in the contract specifications or other documents being a part of this Contract shall be subject to the terms of this paragraph during the one (1) year guarantee period. All special guarantees and manufacturers' warranties shall be delivered to the Engineer before shop drawings on items of major equipment are approved. Guarantees and warranties for other items shall be furnished prior to the acceptance of the work.

9.1.2 GENERAL REQUIREMENTS. Construction of storm and sanitary sewers in the City of Waukesha will follow the Standard Specifications For Sewer And Water Construction In Wisconsin, 5th Addition, dated March 1, 1988 except as amended by the City of Waukesha under Chapter 9.2.0 of this specification.

9.2.0 AMENDMENTS TO:
STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN
* Refers to Sections in above specified book

9.2.1 Chapter 1*will be as per City of Waukesha Standard Specifications.

9.2.2 Chapter 2.6.2* GRANULAR BACKFILL. When granular backfill or sand backfill is required, it shall conform to the requirements of Table 37 as revised below from Section 6.43.4.

Table 37 (Revised)

Gradation Requirements for Granular Backfill

| <u>Sieve Sizes</u> | <u>Percentage Passing by Weight</u> |
|--------------------|-------------------------------------|
| 2 inch | 95 - 100% |
| No. 4 | 35 - 60% |
| Finer than No. 200 | 3 - 10% |

9.2.3 Chapter 2.6.16* MAINTENANCE OF TRENCH SURFACE. The Contractor shall be responsible for placing the specified trench surfacing and for its maintenance and safety to travel until the work under the Contract has been accepted.

9.2.4 Chapter 3.4.2* BRANCH FITTINGS, PIPE AND JOINTS. Table 4 revised as follows:

TABLE 4 (Revised)

PIPE MATERIALS AND JOINTS TO BE USED FOR RECONNECTIONS

| <u>Existing Material Of Service Or Drain Encountered</u> | <u>Pipe Material To Be Used</u> |
|--|--|
| Clay | D 3034 PVC SDR 35 or Extra Strength Vit. Clay |
| Concrete | D 3034 PVC SDR 35 or Extra Strength Vit. Clay or Class 3 Concrete |
| Asbestos-Cement | D 3034 PVC SDR 35 or Extra Strength Vit. Clay or Class 3 Concrete |
| Cast Iron | Cast Iron D 3034 PVC SDR 35 or Extra Strength Vit. Clay or Class 3 Concrete |

9.2.5 CHAPTER 3.5.3* TYPES OF MANHOLES. Requirements of Section 3.5.3 apply except that the minimum size manhole allowable for 8" thru 27" diameter sewers shall be 48" diameter.

9.2.6 CHAPTER 3.5.4* (e) CASTINGS. Manhole frames and covers shall meet the requirements of Chapter 3.5.4 (e.) and in addition to those general requirements only frames and covers of locking-non-rocking construction are acceptable.

9.2.7 CHAPTER 3.5.4* (f) FRAME/CHIMNEY JOINTS. Type I frame chimney joints are not required on sanitary sewer manholes unless they are called for on the plans. Where Type I frame chimney joints are called for, they shall be of the internal type.

9.2.8 CHAPTER 3.6.1* (i) CASTINGS. All castings for storm water inlets shall conform to the appropriate type shown for various types of storm water inlets on the detail drawings in this specification.

9.2.9 CHAPTER 3.6.3* STORM WATER INLET. Storm water inlets of masonry construction shall conform to the appropriate detail in the City of Waukesha Specifications.

The concrete brick and masonry units used in storm inlets only shall conform to the following specifications:

- 1) Minimum compressive strength of 5,500 PSI at 28 days
- 2) Maximum water absorption shall not exceed 5 pounds per cubic foot.
- 3) Must be marked by being stamped, a pigment color added or other approved markings.

Storm inlets shall have a plaster coat of conproco structural skin or approved equivalent applied to their interior and exterior surfaces. It shall be applied to a minimum 1/8" thickness according to manufacturers recommendations. The surfaces of the storm inlets must be primed with conproco K-88 primer or approved equivalent prior to plastering them with the conproco structural skin.

9.2.10 CHAPTER 4.1.0* GENERAL. All water main construction in the City of Waukesha shall be done according to the current rates, rules and regulations of the Waukesha Water Utility as on file with the Public Service Commission of Wisconsin.

9.2.11 CHAPTER 5.2.4* WATER SERVICE PIPING. Water service piping shall be in conformance with the requirements of the Waukesha Water Utility and the Wisconsin Administrative Code.

9.2.12 CHAPTER 5.3.1* CONNECTION POINT TO MAIN SEWER. No person except bonded master plumbers shall tap or make connections with the general sewerage system or any part thereof. Such information as the Plumbing Inspector or the City Council or the City Engineer may have with regard to the location of sewer junctions or slants will be furnished to bonded master plumbers. The City assumes no risk as to the accuracy of the same. When, in accordance with the measurements furnished by the Board of Public Works or the Plumbing Inspector, the junction is not found within 5 feet of both ways of measurements given, a slant connection shall be made under the direction of the Plumbing Inspector.

9.2.13 CHAPTER 6.4.0* CLAY SEWER PIPE. Clay sewer pipe may be used in the City of Waukesha only with the express written permission of the City Engineer.

9.2.14 CHAPTER 6.9.0* POLYVINYL CHLORIDE (PVC) CORRUGATED SEWER PIPE. Polyvinyl chloride (PVC) corrugated sewer pipe may be used in the City of Waukesha only with the express written permission of the City Engineer.

9.2.15 CHAPTER 6.11.0* ABS AND PVC COMPOSITE SEWER PIPE AND FITTINGS. ABS and PVC composite sewer pipe and fittings may be used in the City of Waukesha only with the express written permission of the City Engineer.

9.2.16 CHAPTER 6.12.0* ABS SOLID WALL (ACRYLONITRILE - BUTADIENE - STYRENE) SEWER PIPE AND FITTINGS. ABS solid wall (acrylonitrile - butadiene - styrene) sewer pipe and fittings may be used in the City of Waukesha only with the express written permission of the City Engineer.

